

IN THE CLAIMS:

Please amend the claims as follows:

1. **(Currently Amended)** An ultra-thin copper foil with a carrier comprised of a carrier foil, a peeling layer, and an ultra-thin copper foil layer, wherein said ultra-thin copper foil layer and said peeling layer are provided between them with a strike plating layer and wherein said ultra-thin copper foil layer and said strike plating layer are one of a phosphorus-containing copper layer and a phosphorus-containing copper alloy layer and wherein said peeling layer and said strike plating layer are composed of materials that are distinct and different from each other.

2. **(Currently Amended)** An ultra-thin copper foil with a carrier comprised of a carrier foil, a peeling layer, and an ultra-thin copper foil layer, wherein said ultra-thin copper foil layer and said peeling layer are provided between them with a strike plating layer comprised of one of a phosphorus-containing copper layer and a phosphorus-containing copper alloy layer, said strike plating layer is provided thereon on it with a copper plating ultra-thin layer, and said ultra-thin layer is provided thereon on it with said ultra-thin copper foil layer comprised of one of copper and a copper alloy and wherein said peeling layer and said strike plating layer are composed of materials that are distinct and different from each other.

3. **(Currently Amended)** An ultra-thin copper foil with a carrier comprised of a carrier foil, a peeling layer, and an ultra-thin copper foil layer, wherein said ultra-thin copper foil layer and said peeling layer are provided between them with a strike plating layer comprised of one of a phosphorus-containing copper layer and a phosphorus-containing copper alloy layer, said strike plating layer is provided thereon on it with a

copper plating ultra-thin layer, and said ultra-thin layer is provided thereon ~~on it~~ with said ultra-thin copper foil layer comprised of one of a phosphorus-containing copper layer and a phosphorus-containing copper alloy layer and wherein said peeling layer and said strike plating layer are composed of materials that are distinct and different from each other.

4. **(Currently Amended)** An ultra-thin copper foil with a carrier comprised of a carrier foil, a peeling layer, and an ultra-thin copper foil layer, wherein said ultra-thin copper foil layer and said peeling layer are provided between them with a strike plating layer comprised of one of a phosphorus-containing copper layer and a phosphorus-containing copper alloy layer, said strike plating layer is provided ~~on it~~ thereon with an ultra-thin layer comprised of one of a phosphorus-containing copper layer and phosphorus-containing copper alloy layer, and the ultra-thin layer is provided ~~on it~~ thereon with said ultra-thin copper foil layer comprised of one of copper and a copper alloy and wherein said peeling layer and said strike plating layer are composed of materials that are distinct and different from each other.

5. **(Currently Amended)** An ultra-thin copper foil with a carrier comprised of a carrier foil, a peeling layer, and an ultra-thin copper foil layer, wherein said ultra-thin copper foil layer and said peeling layer are provided between them with a strike plating layer comprised of one of a phosphorus-containing copper layer and a phosphorus-containing copper alloy layer, said strike plating layer is provided thereon ~~on it~~ with an ultra-thin layer comprised of one of a phosphorus-containing copper layer and phosphorus-containing copper alloy layer, and the ultra-thin layer is provided thereon ~~on it~~ with said ultra-thin copper foil layer comprised of one of a phosphorus-

containing copper and a phosphorus-containing copper alloy and wherein said peeling layer and said strike plating layer are composed of materials that are distinct and different from each other.

6. **(Currently Amended)** An ultra-thin copper foil with a carrier comprised of a carrier foil, a peeling layer provided on the carrier foil, and an ultra-thin copper foil layer provided on the peeling layer, wherein a surface roughness Rz of a surface of the carrier foil facing the ultra-thin copper layer on the ultra-thin copper foil side is in a range of 0.1 μm to 5 μm, a surface roughness Rz of a surface of the ultra-thin copper layer facing the carrier foil side of the ultra-thin copper foil provided on the peeling layer provided on said carrier foil surface is in a range of 0.1 μm to 5 μm, and wherein there is disposed between said peeling layer and said ultra-thin copper layer a copper or copper alloy layer covering at least 90% of a surface of the peeling layer facing the ultra-thin copper layer at a position approximately 0.1 μm to 0.2 μm away from an average height of projections extending from a surface relief of a surface of the peeling layer facing the ultra-thin copper layer one of a copper and copper alloy layer covering at least 90% of the area of the surface of the peeling layer is formed at a position of the surface roughness Rz of the ultra-thin copper foil plus 0.1 μm to 0.2 μm at the ultra-thin copper foil side from the projections of the surface relief on the carrier foil side of the ultra-thin copper foil, and a peel strength after hot bonding of at least 300°C is 0.01 KN/m to 0.05 KN/m.

7. **(Currently Amended)** An ultra-thin copper foil with a carrier comprised of a carrier foil, a peeling layer provided on the carrier foil, and an ultra-thin copper foil layer provided on the peeling layer, wherein a surface roughness Rz of a surface of the

carrier foil facing the ultra-thin copper layer on the ultra-thin copper foil side is in a range of 0.1 µm to 5 µm, a surface roughness Rz of a surface of the ultra-thin copper layer facing the carrier foil side of the ultra-thin copper foil provided on the peeling layer provided on said carrier foil surface is in a range of 0.1 µm to 5 µm, and wherein there is disposed between said peeling layer and said ultra-thin copper layer a copper or copper alloy layer having a conductivity of at least 90% formed on a surface of the peeling layer facing the ultra-thin copper layer at a position approximately 0.1 µm to 0.2 µm away from an average height of projections extending from a surface relief of a surface of the peeling layer facing the ultra-thin copper layer one of a copper and copper alloy layer having a conductivity of at least 90% is formed at a position of the surface roughness Rz of the ultra-thin copper foil plus 0.1 µm to 0.2 µm at the ultra-thin copper foil side from the projections of the surface relief on the carrier foil side of the ultra-thin copper foil, and a peel strength after hot bonding of at least 300°C is 0.01 KN/m to 0.05 KN/m.

8. **(Currently Amended)** An ultra-thin copper foil with a carrier as set forth in any one of claims 1 to 5, wherein ~~the~~ a surface roughness Rz of ~~the~~ a surface of the carrier foil surface ~~at~~ facing the ultra-thin copper foil layer side is in a range of 0.1 µm to 5 µm and ~~the~~ wherein a peel strength after hot bonding of at least 300°C is 0.01 KN/m to 0.05 KN/m.

9. **(Currently Amended)** An ultra-thin copper foil with a carrier as set forth in any one of claims 1 to 5, wherein a surface roughness Rz of a surface of the carrier foil facing the ultra-thin copper layer on the ultra-thin copper foil side is in a range of 0.1 µm to 5 µm, a surface roughness Rz of a surface of the ultra-thin copper layer facing the carrier foil side of the ultra-thin copper foil provided on the peeling layer provided on

said carrier foil surface is in a range of 0.1 μm to 5 μm , and wherein there is disposed between said peeling layer and said ultra-thin copper layer a copper or copper alloy layer covering at least 90% of a surface of the peeling layer facing the ultra-thin copper layer at a position approximately 0.1 μm to 0.2 μm away from an average height of projections extending from a surface relief of a surface of the peeling layer facing the ultra-thin copper layer one of a copper and copper alloy layer covering at least 90% of the area of the peeling layer surface is formed at a position of the surface roughness R_z of the ultra-thin copper foil plus 0.1 μm to 0.2 μm at the ultra-thin copper foil side from the projections of the surface relief on the carrier foil side of the ultra-thin copper foil, and a peel strength after hot bonding of at least 300°C is 0.01 KN/m to 0.05 KN/m.

10. (Currently Amended) An ultra-thin copper foil with a carrier as set forth in any one of claims 1 to 5, wherein a surface roughness R_z of a surface of the carrier foil facing the ultra-thin copper layer on the ultra-thin copper foil side is in a range of 0.1 μm to 5 μm , a surface roughness R_z of a surface of the ultra-thin copper layer facing the carrier foil carrier foil side of the ultra-thin copper foil provided on the peeling layer provided on said carrier foil surface is in a range of 0.1 μm to 5 μm , and wherein there is disposed between said peeling layer and said ultra-thin copper layer a copper or copper alloy layer having a conductivity of at least 90% formed on the surface of the peeling layer facing the ultra-thin copper layer at a position approximately 0.1 μm to 0.2 μm away from an average height of projections extending from a surface relief of a surface of the peeling layer facing the ultra-thin copper layer one of a copper and copper alloy layer having a conductivity of at least 90% is formed at a position of the surface roughness R_z of the ultra-thin copper foil plus 0.1 μm to 0.2 μm at the ultra-thin copper

~~foil side from the projections of the surface relief on the carrier foil side of the ultra-thin copper foil, and a peel strength after hot bonding of at least 300°C is 0.01 KN/m to 0.05 KN/m.~~

11. (Original)An ultra-thin copper foil with a carrier as set forth in any one of claims 1 to 7, wherein said peeling layer is one of a chromium metal and chromium alloy.

12. (Original)An ultra-thin copper foil with a carrier as set forth in any one of claims 1 to 7, wherein said peeling layer is one of an oxide hydrate of a chromium metal and chromium alloy.

13. (Original)An ultra-thin copper foil with a carrier as set forth in any one of claims 1 to 7, wherein said peeling layer is formed by one of a chromium metal, chromium alloy, and oxide hydrate of one of a chromium metal and chromium alloy.

14. (Original)An ultra-thin copper foil with a carrier as set forth in claim 11, wherein the amount of deposited metal of one of a chromium metal and chromium alloy of the peeling layer is not more than 4.5 mg/dm².

15. (Original)An ultra-thin copper foil with a carrier as set forth in claim 12, wherein the amount of deposited metal of one of a chromium metal and chromium alloy in the peeling layer comprised of an oxide hydrate is not more than 0.015 mg/dm².

16. (Original)An ultra-thin copper foil with a carrier as set forth in claim 13, wherein the amount of deposited metal of one of a chromium metal and chromium alloy of the peeling layer is not more than 4.5 mg/dm².

17. (Original) An ultra-thin copper foil with a carrier as set forth in any one of claims 1 and 5 to 7, wherein said peeling layer is one of nickel, iron, an alloy of the same, and an oxide hydrate containing the same.

18. (Cancelled)

19. (Cancelled)

20. (Cancelled)

21. (Cancelled)

22. (Cancelled)

23. (Cancelled)

24. (Cancelled)

25. (Original) A printed circuit board wherein an ultra-thin copper foil with a carrier as set forth in any one of claims 1 to 7 is used to form high density ultrafine interconnects.

26. (Cancelled)

27. (Original) A printed circuit board wherein an ultra-thin copper foil with a carrier as set forth in claim 8 is used to form high density ultrafine interconnects.

28. (Original) A printed circuit board wherein an ultra-thin copper foil with a carrier as set forth in claim 9 is used to form high density ultrafine interconnects.

29. (Original) A printed circuit board wherein an ultra-thin copper foil with a carrier as set forth in claim 10 is used to form high density ultrafine interconnects.